FINAL REPORT ON THE COMPREHENSIVE PROGRAM REVIEW OF THE MASTER'S DEGREE IN ENVIRONMENTAL SCIENCE

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Major Findings of the Program's Quality and Productivity

I would rate the program as *very strong* in quality and *satisfactory* in productivity, and I would generally agree with the assessment of the program's faculty detailed in the ENVS self-study. The Environmental Science faculty are among the strongest in the College in teaching, research, and service. Further, the program does an excellent job of training its students for careers in a variety of fields.

In the past, the Department has been plagued by low enrollments and, as a consequence, low numbers of graduates (including one year—2007-2008—which produced no ENVS graduates). In addition, retention figures hover around the 67% mark, certainly not an unacceptable figure, but a bit lower than many master's programs on campus. Fortunately, enrollments and graduation rates have increased significantly over the past two years, and the program has developed a number of creative plans to strengthen recruitment, graduation, and retention. Based on these efforts and the high quality of the faculty and students, I consider this to be a program with a very bright future.

Program Improvement Plan

From the External Review Committee:

Final Recommendations

1) Graduate stipends - As indicated in the Self-Study, the review committee concurs that current levels of stipends are low and non-competitive with current amounts at some other, potentially competing institutions. We recommend increasing the size and number of stipends through a development campaign targeted at graduate fellowship acquisition for the ENVS program. We further recommend that this be made a top priority for the CSU and College development program.

The College supports adding graduate student stipends and scholarships to its development priorities. In addition, however, I would recommend that the program and its constituent departments consider adding course fees to all undergraduate Environmental Science courses, which could be used to create and augment graduate teaching assistantships.

2) Space and facilities - The review team visited many of the current laboratories associated with the ENVS program and found those to be crowded both from the perspective of faculty / student use as well as equipment placement. Apart from hindering program development through constriction of productivity, potential graduate students will gain a negative impression of the program when viewing the overcrowding. We recommend that Room 163A in Lenoir Hall and the area currently used for storage on the east end of the Lenoir Annex be converted to cubicle and research work space for graduate students.

The College and University recognize the space limitations facing the program. Rather than converting Room 163A of the LeNoir Annex, a larger space in Clearview Hall is being renovated for lab use by the Environmental Science faculty. This space should be available sometime during the 2011-2012 academic year.

3) In order to mentor higher numbers of graduate students, some relief from heavy undergraduate teaching loads should be made available for those faculty involved in the graduate program. One obvious source for this relief may be teaching load buy-outs from the use of grant or endowment funds. However, the review committee recognizes the complexity of replacing teachers associated with upper level courses and suggests that a plan be developed for overcoming such obstacles.

The chairs of Earth and Space Sciences, Biology, and Chemistry should work within the framework of the College's "Workload Equity" initiative to provide faculty relief from heavy undergraduate teaching responsibilities. I will also strongly support efforts by program faculty to seek external funding to help meet this goal.

4) One of the primary obstacles to increased enrollment is the low profile of the ENVS program on campus and within the region. CSU has an outstanding 'product' in the ENVS program and one which can be sold widely in the graduate student recruitment marketplace. However, that product must be advertised and marketed in order to reap full benefits to CSU.

The College will support the program's efforts in this regard.

5) There is a strong need to develop a clear administrative structure for the ENVS program. At present, the program exists as a component of several departments, a situation that restricts both the operation and profile of the program. We recommend that the ENVS program be constituted as a center headed by a director who reports directly to the Dean of the College.

I strongly concur with this recommendation.

- 6) The graduate students with whom the review committee met were very pronounced in praising the efforts of the faculty. The primary suggestion from the students' input was that their advising might be made more effective if a major advisor was assigned to each student at the onset of the student's entry into the program rather than at the time of project selection.
 - I also concur with this recommendation, and believe that the development of a clearer and more cooperative administrative structure will help to create a strategy for improving advising within the program, particularly given that program faculty reside in several departments.
- 7) While there are strong indications that graduate student mentoring is taken into account in promotion and tenure decisions at the College level, the extent of that consideration at the University level is unclear to faculty. We recommend that, as CSU moves forward to increase graduate enrollment on campus, a promotion and tenure workshop should be organized by the Provost's office to communicate the role of graduate mentoring in the P&T process.

I will pass this recommendation on to Provost Hackett and Assistant Provost Domin.

From the Program Self-Study (where not otherwise discussed above):

• Hire a new faculty member in Environmental Science

As noted previously, as recruitment, retention, and graduation numbers (as well as College resources) further improve, we will strongly consider this possibility.

Gain Admission to the Gulf Coast section of the Cooperative Ecosystem Studies Units (GC-CESU)

Dr. Julie Ballenger of the Biology Department is spearheading this effort, and I expect that CSU will gain admission during the next year.

• Strengthening of Ties with Fort Benning

ENVS faculty members are coordinating their efforts with CSU's Ft. Benning liaison, retired Lt. Col. Mark Ridley, and I expect that those efforts will bear fruit shortly.

• Implement new ENVS undergraduate track to feed the graduate program

This important initiative is already underway, and its success will be central to the growth of the ENVS graduate program.

• Create a 4 – 1 undergraduate – graduate degree program.

This is an exciting initiative, and I urge the program to move forward on it as soon as possible.

• Offer a new professional science masters degree track

I support the program's efforts to move forward on this, though I would warn against over-expansion of the program given finite current resources.

 Develop articulation agreements with Georgia Perimeter College and Other 2-Year Colleges in Georgia to provide students a fast-track to the proposed ENVS undergraduate degree

I urge the program to move forward on this as quickly as practical.

- Increase recruiting efforts through:
 - · development of powerful internet marketing tools
 - · development of an attractive ENVS program brochure
 - · travel to other campuses in our region to promote our program
 - · promotional activities at professional meetings

The College will, within the limits of its resources, provide financial support for these efforts.

Timetable for program changes

Year 1 (2011 – 2012 Academic Year)

Implement Environmental Science undergraduate major

Complete application for membership in Gulf Coast section of the Cooperative Ecosystems Studies Unit

Review and change review criteria for faculty

Seek increase in number and financial amount of graduate assistantships

<u>Year 2 (2012 – 2013 Academic Year)</u>

Conclude negotiations with Fort Benning personnel

Conclude cooperative agreement with Oxbow Meadows

Conclude negotiations with Georgia Perimeter College

Occupy new ENVS lab space in Clearview II

Seek increased funding for faculty sabbaticals and professional travel

Seek funding for major equipment acquisitions

Develop 4 - 1 undergraduate – graduate program

Year 3 (2013 - 2014 Academic Year)

Develop 4 – 1 undergraduate – graduate program

Develop Professional Science Masters degree program

Hire new faculty member

Occupy graduate student office space / computer work room

Seek funding for major equipment acquisitions

<u>Year 4 (2014 – 2015 Academic Year)</u>

Acquire 10-passenger van for the ENVS program Seek funding for major equipment acquisitions

<u>Year 5 (2015 – 2016 Academic Year)</u>

Acquire boat for river and lake research and for student field trips Seek funding for major equipment acquisitions Hire new faculty member

Address any new or reallocated resources required to implement improvement plan

- Two additional full-time faculty lines, at \$50,000 apiece (plus benefits)
- Support for course reductions.
- Funds equipment purchases, lab space, van, and boat
- Increased funding for student assistantships and stipends
- Funding for recruitment efforts.

I look forward to consulting regularly with the Director of the Environmental Science Program, as well as the program's faculty to make progress toward implementation of this action plan.